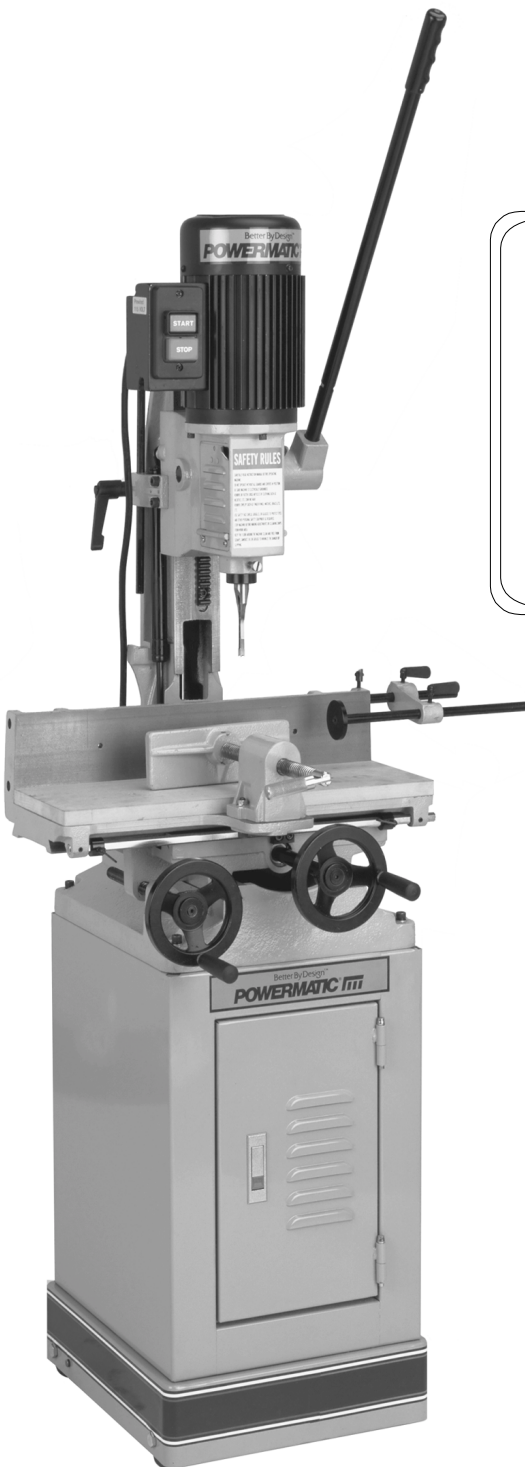


MAINTENANCE & OPERATING INSTRUCTIONS



Hollow Chisel MORTISER

Model 719A

0460225

POWERMATIC®

This manual has been prepared for the owner and operators of a Powermatic Model 719A Mortiser. Its purpose, aside from machine operation, is to promote safety through the use of accepted correct operating and maintenance procedures. Completely read the safety and maintenance instructions before operating or servicing the machine. To obtain maximum life and efficiency from your mortiser, and to aid in using the machine safely, read this manual thoroughly and follow all instructions carefully.

Warranty & Service

The JET Group warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Repair Stations located throughout the United States can give you quick service.

In most cases, any one of these JET Group Repair Stations can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET, Performax or Powermatic tools.

For the name of an Authorized Repair Station in your area, please call 1-800-274-6848.

More Information

Remember, the JET Group is consistently adding new products to the line. For complete, up-to-date product information, check with your local JET Group distributor.

JET Group Warranty

The JET Group (including Performax and Powermatic brands) makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follow: 1 YEAR LIMITED WARRANTY ON ALL PRODUCTS UNLESS SPECIFIED OTHERWISE. This Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, repair or alterations outside our facilities, or to a lack of maintenance.

THE JET GROUP LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE, FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THE JET GROUP SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to an Authorized Repair Station designated by our office. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will either repair or replace the product, or refund the purchase price if we cannot readily and quickly provide a repair or replacement, if you are willing to accept a refund. We will return repaired product or replacement at JET's expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of JET's warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

The JET Group sells through distributors only. Members of the JET Group reserve the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

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SAFETY RULES

As with all power tools there is a certain amount of hazard involved with the operation and use of the tool. Use the tool with the respect and caution demanded where safety precautions are concerned. This will considerably lessen the possibility of personal injury. When normal safety precautions are overlooked or completely ignored, personal injury to the operator can result.

1. **KNOW YOUR TOOL.** Read the owner's manual carefully. Learn the tools applications and limitations, as well as the specific potential hazards peculiar to it.
2. **KEEP GUARDS IN PLACE** and maintained in working order.
3. **GROUND ALL TOOLS.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter plug must be attached to a known ground. Never remove the third prong.
4. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
5. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
6. **AVOID DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
7. **KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.
8. **MAKE WORKSHOP CHILDPROOF** - with padlocks, master switches, or by removing starter keys.
9. **DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.
10. **USE RIGHT TOOL.** Don't force tool or attachment to do a job it was not designed for.
11. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, or jewelry that can get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
12. **USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
13. **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
14. **DON'T OVERREACH.** Keep your proper footing and balance at all times.
15. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DISCONNECT TOOLS** before servicing and when changing accessories such as chisel and bit.
17. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause hazards.
18. **AVOID ACCIDENTAL STARTING.** Make sure switch is in "OFF" position before plugging in cord.
19. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
20. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
21. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
22. **DRUGS, ALCOHOL, MEDICATION.** Do not operate tool while under the influence of drugs, alcohol, or any medication.

MODEL 719A MORTISER

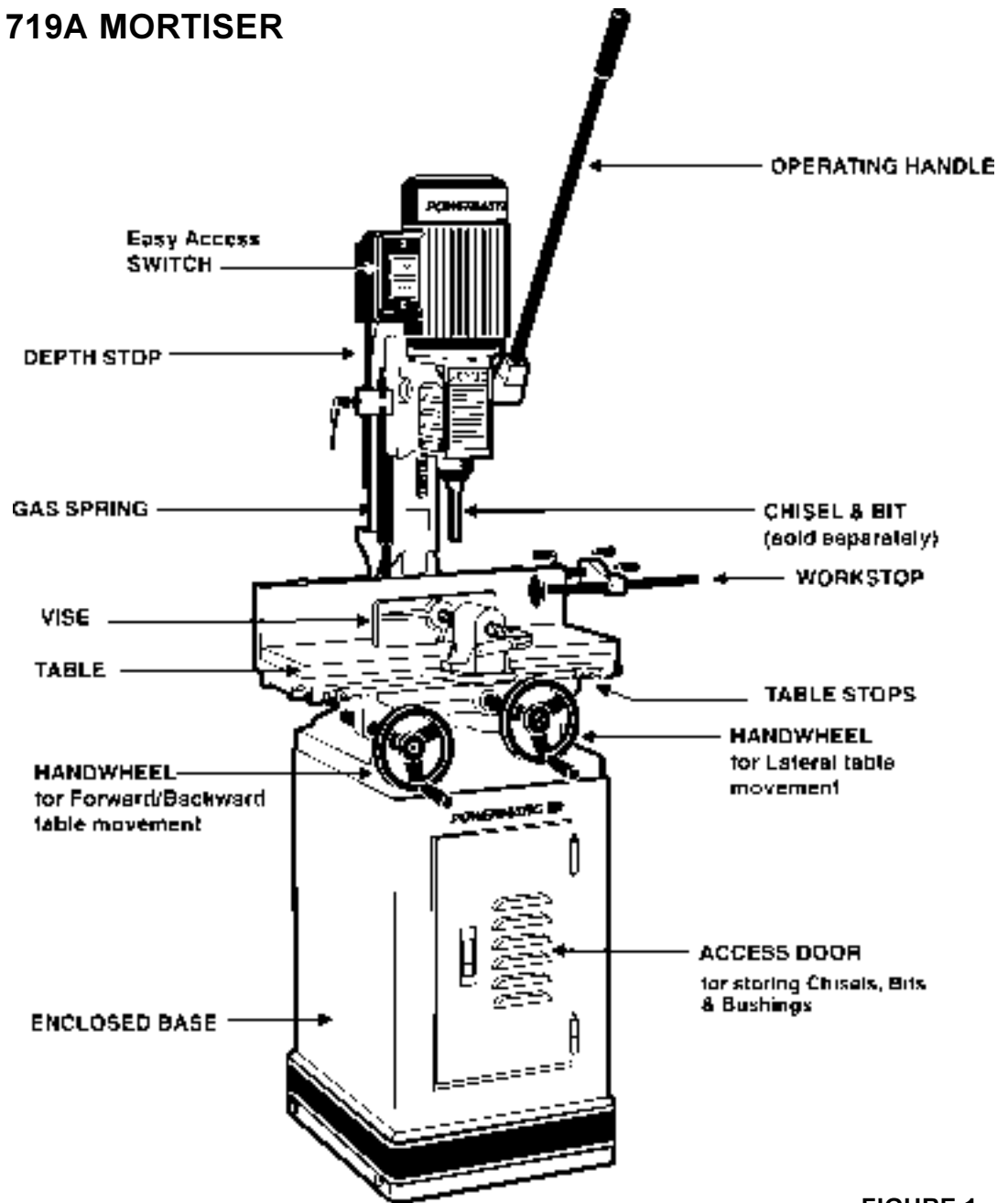


FIGURE 1

SPECIFICATIONS

| | |
|--|-------------------------------------|
| Motor | 1 HP, 1 PH, 115/230V, prewired 115V |
| Speed | 1725 RPM |
| Chisel capacity | 1/4" - 1" |
| Chisel shank capacity | 5/8", 3/4", 1-1/8" |
| Max. chisel stroke | 8" |
| Distance, fence to center chisel | 4" |
| Chuck capacity | 1/2" |
| Table movement | |
| Long-ways | 16" |
| Cross-ways | 4" |
| Table size | 10" x 20" |
| Base dimensions | 14" x 16" |
| Height | 33" |
| Overall dimensions | 21-1/4" L x 21-5/8" W x 61-3/16" H |

RECEIVING THE MORTISER

Remove mortiser and stand from the shipping cartons. Check for damage and ensure all parts are intact. Any damage should be reported immediately to your distributor and shipping agent. Before assembling, read the manual thoroughly, familiarizing yourself with correct assembly and maintenance procedures and proper safety precautions.

Contents of shipping cartons:

Unit shipped in two cartons.

Stand carton

- 1 Stand
- 1 Hardware package

Main Unit carton

- 1 Mortiser with motor
- 1 Operating handle
- 1 Chuck removing wrench
- 2 Handwheel handles
- 1 Chuck key
- 3 Chisel bushings
- 1 Wooden table
- 2 M6 x 20 Philips head screws
- 1 Chuck extension adaptor

INSTALLATION

The mortiser should be secured to the stand with four screws (provided) using the holes in the base. Make sure there is enough room on each side of the mortiser for the size stock you plan to use.

⚠ WARNING: THE MORTISER HAS A THREE-PRONG PLUG AND REQUIRES A GROUNDED OUTLET. IN THE EVENT OF A MALFUNCTION OR BREAKDOWN, GROUNDING PROVIDES A PATH OF LEAST RESISTANCE FOR ELECTRIC CURRENT TO REDUCE THE RISK OF ELECTRIC SHOCK.

IF YOU ARE NOT SURE WHETHER YOUR OUTLET IS PROPERLY GROUNDED, CONSULT A QUALIFIED ELECTRICIAN.

ADJUSTMENTS

INSTALLING/REPLACING CHISEL & BIT

1. Loosen screw, Figure 2.
2. Insert chisel bushing (with the hole facing forward) into the head. Tighten the screw just enough to hold the chisel in place.

NOTE: Set the slot in the side of the chisel to the left or right, NOT to the front or back. This will allow chips to escape when cutting mortises.

3. Push the chisel up as far as possible into the

head. Then lower the chisel approximately 1/16" to 3/16", depending on the type of wood being worked. Tighten the screw to hold chisel in place.

4. Push bit up through the chisel opening as far as it will go. Lock the drill bit in place with the chuck key.

5. Loosen screw and push chisel up against the bushing, then tighten screw. This should provide the proper distance between the points of the chisel and the bit.

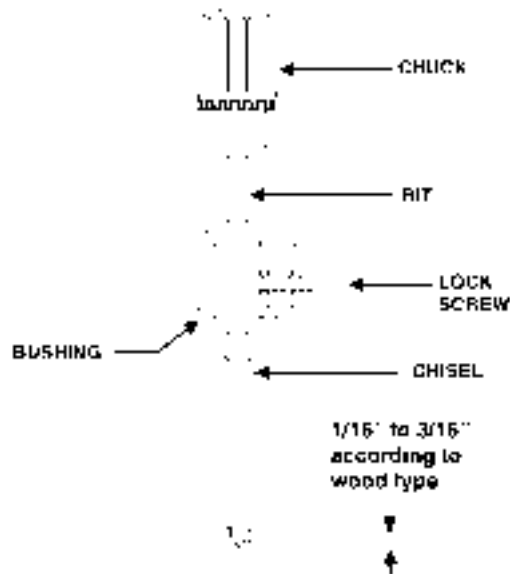


FIGURE 2

WORK STOP

The work stop can be mounted to either end of the table through the holes in the back of the table, as shown in Figure 3. It is tightened into place by means of thumb screws.

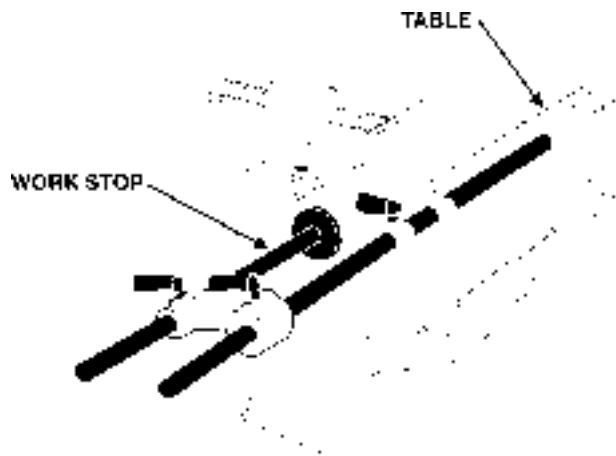


FIGURE 3

CHUCK EXTENSION ADAPTOR

To lower the chuck with the adaptor proceed as follows (Figure 4):

1. Remove chisel and bit.
2. Unscrew the chuck release nut which will force the chuck off the shaft. (NOTE: It may be necessary to hold the shaft stationary while turning the nut. This can be done by inserting a rod or dowel into the hole in the chuck and allowing it to wedge against the edge of the headstock.)
3. When the chuck is off, return the nut to its original position on the shaft.
4. Push the optional adaptor onto the motor shaft as shown. Then push the chuck onto the adaptor.

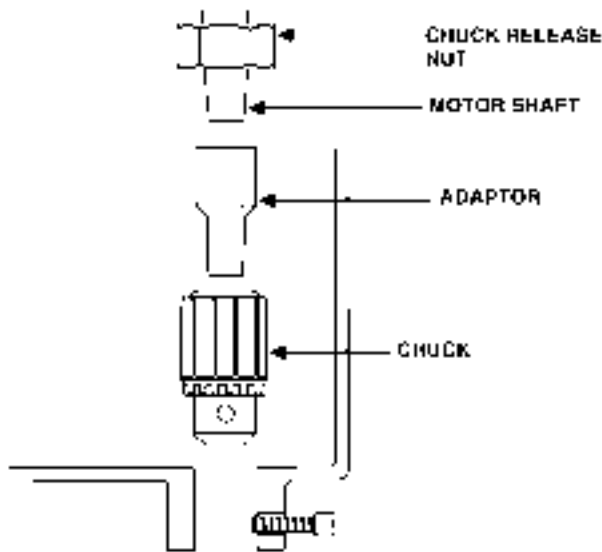


FIGURE 4

OPERATION

1. Set depth stop to the required depth of cut, Figure 5.
2. Place workpiece on table and clamp it with the vise. Use the left handwheel to move table forward or backward to suit the position of the mortise on the workpiece.
3. Adjust the table stops, Figure 6, according to the length of cut required, then tighten the thumb screws.
4. Turn on machine and feed chisel and bit steadily into workpiece by pulling down the operating handle.

NOTE: The rate of feed must be fast enough to prevent burning at the tip of the bit, but not so fast as to cause the machine to slow or stall. The different rates of feed for different woods must be learned through experience.

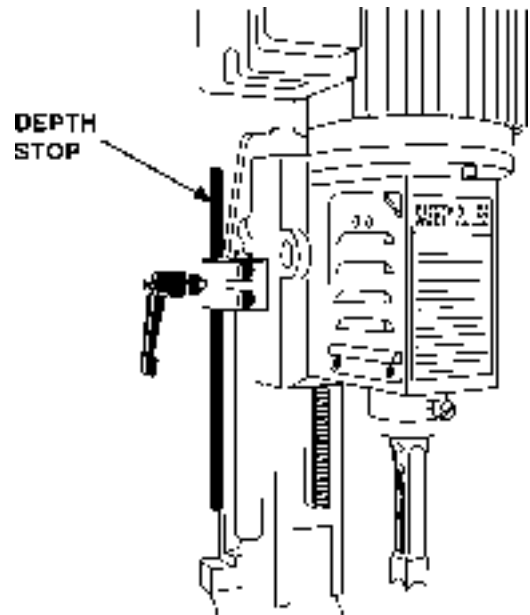


FIGURE 5



FIGURE 6

5. After the first cut, the workpiece is moved along with the right handwheel for each successive cut. The direction of movement must allow the chips to clear freely. Move the workpiece so that the slot in the chisel is releasing chips into the *already cut* part of the workpiece, Figure 7.

⚠ CAUTION: DO NOT HAVE THE CHISEL SLOT AGAINST THE BLIND END OF THE MORTISE, AS THE CHIPS WILL NOT BE ABLE TO CLEAR THE CHISEL. THIS CAN CAUSE OVERHEATING AND POSSIBLE BREAKAGE OF CHISEL OR BIT.

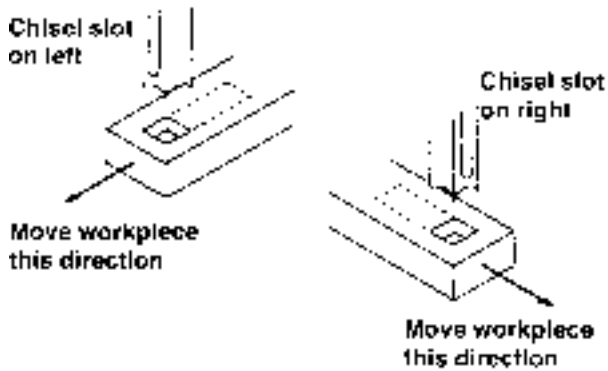


FIGURE 7

When cutting deep mortises, make the cut in several stages of approximately 1" each, to allow chips to clear. To prevent breakout at the back of the workpiece when cutting through mortises, use a piece of scrap material under the workpiece as support.

MAINTENANCE

The Mortiser requires only minor maintenance, such as cleaning and lubrication and routine adjustment and sharpening of the chisel and bit. Dust the machine down after each use and, as necessary, use light applications of oil or grease to lubricate linkages, moving parts, etc.

SHARPENING CHISEL & BIT

The chisel and bit should be kept sharp for best performance. Blunt edges will give inaccurate mortises and can cause overheating and breakage to chisel or bit. If chisel and bit are badly worn and become difficult to sharpen, they should be replaced.

1. Sharpen the bit by using a small, smooth file, following the original shape of the bit. File the inside edge of the spur, the sides of the brad point, and the cutting edge inwards toward the flute of the bit. See Figure 8.

Do not file the outside edge of the spur as this will affect the diameter of the bit.

2. Sharpen the chisel with a mortise chisel cutter with the correct size pilot. (Pilot size will differ depending on the size of your chisel). Two or three turns of the cutter in a carpenter's brace chuck should be enough to sharpen the chisel, Figure 9.

3. Use a small, triangular, smooth file to relieve the inner corners of the chisel, Figure 10, and remove any burrs from the outside of the chisel with a fine oilstone.

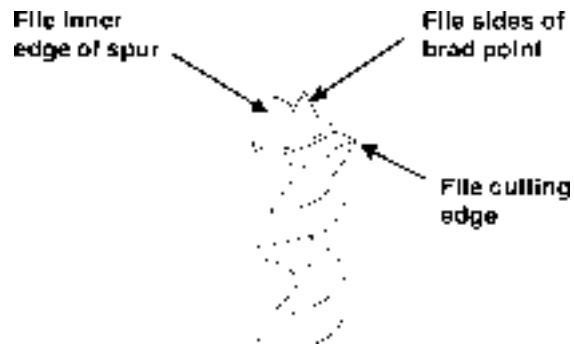


FIGURE 8

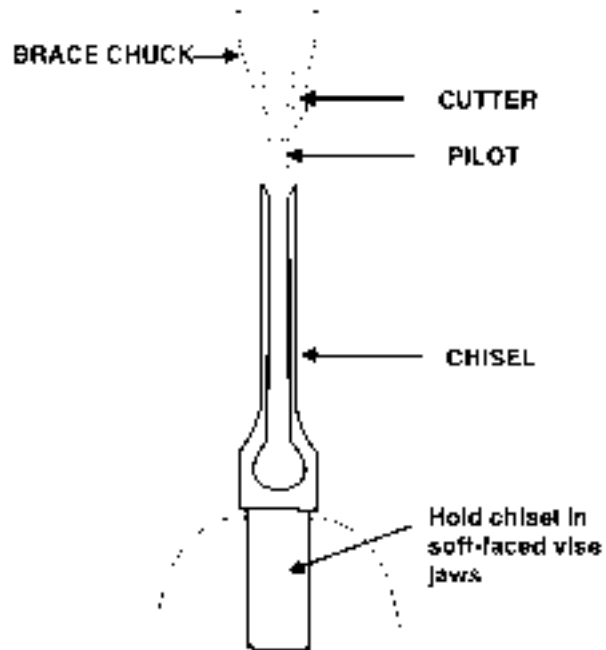


FIGURE 9

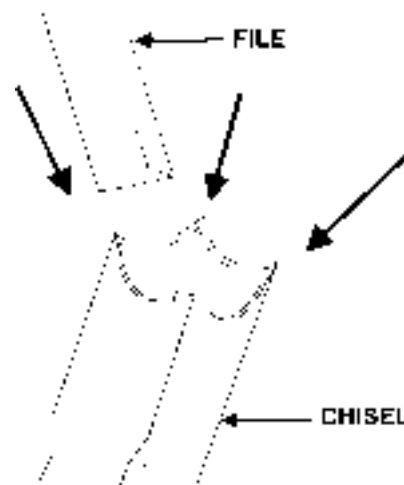
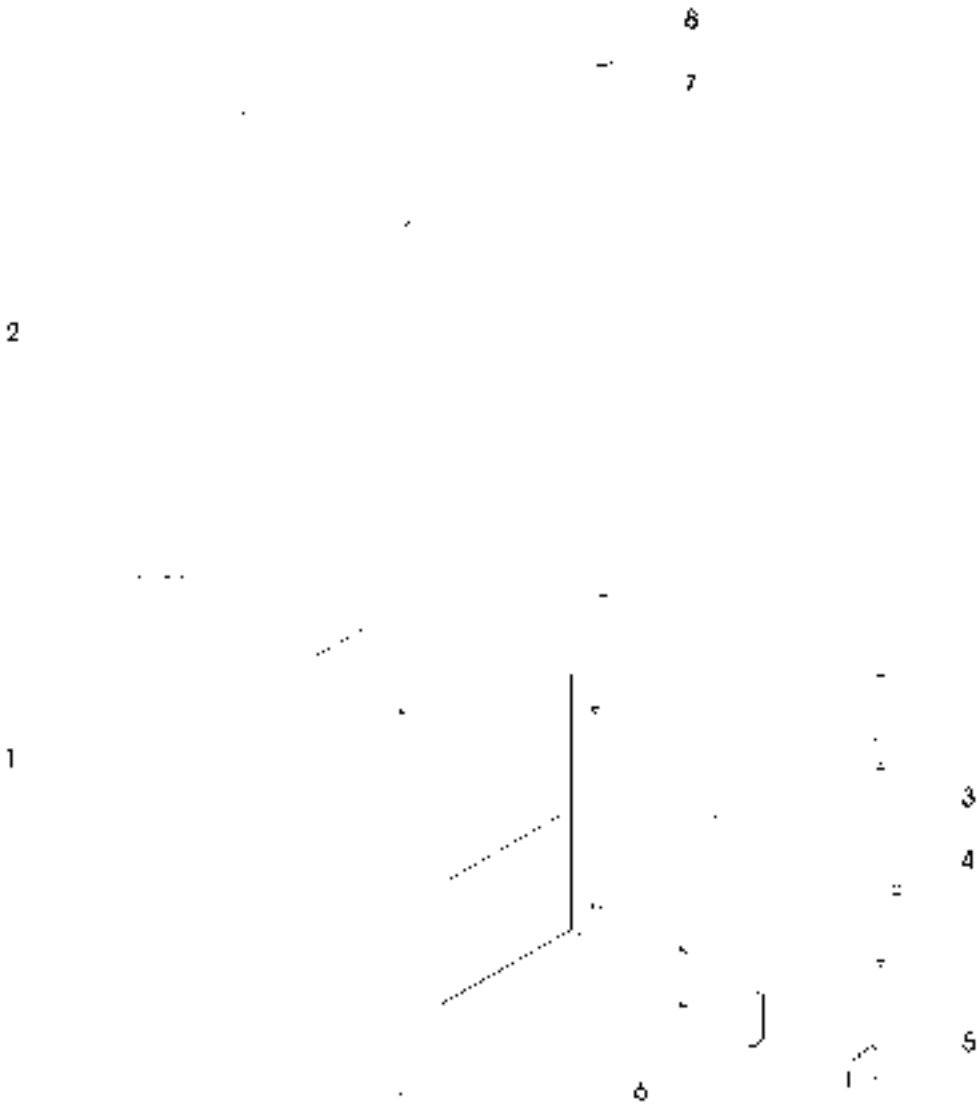


FIGURE 10

PARTS LIST: 719A Stand Assembly

| NO. | PART NO. | DESCRIPTION | NO. | PART NO. | DESCRIPTION |
|-----|----------|------------------------------|-----|----------|-------------------------|
| | 6294235 | STAND ASSY. (Items 1 thru 8) | 4 | 6294227 | PIN |
| 1 | 6294218 | STAND | 5 | 6294228 | LATCH, DOOR |
| 2 | 6294225 | SPONGE, STORAGE | 6 | 6294229 | SCREW, M3 |
| | 6294236 | DOOR ASSY. (Items 3 thru 6) | 7 | 6294220 | WASHER, LOCK, M8 |
| 3 | 6294226 | DOOR | 8 | 6294219 | SCREW, HEX. HD, M8 X 60 |



PARTS LIST: Model 719A Mortiser

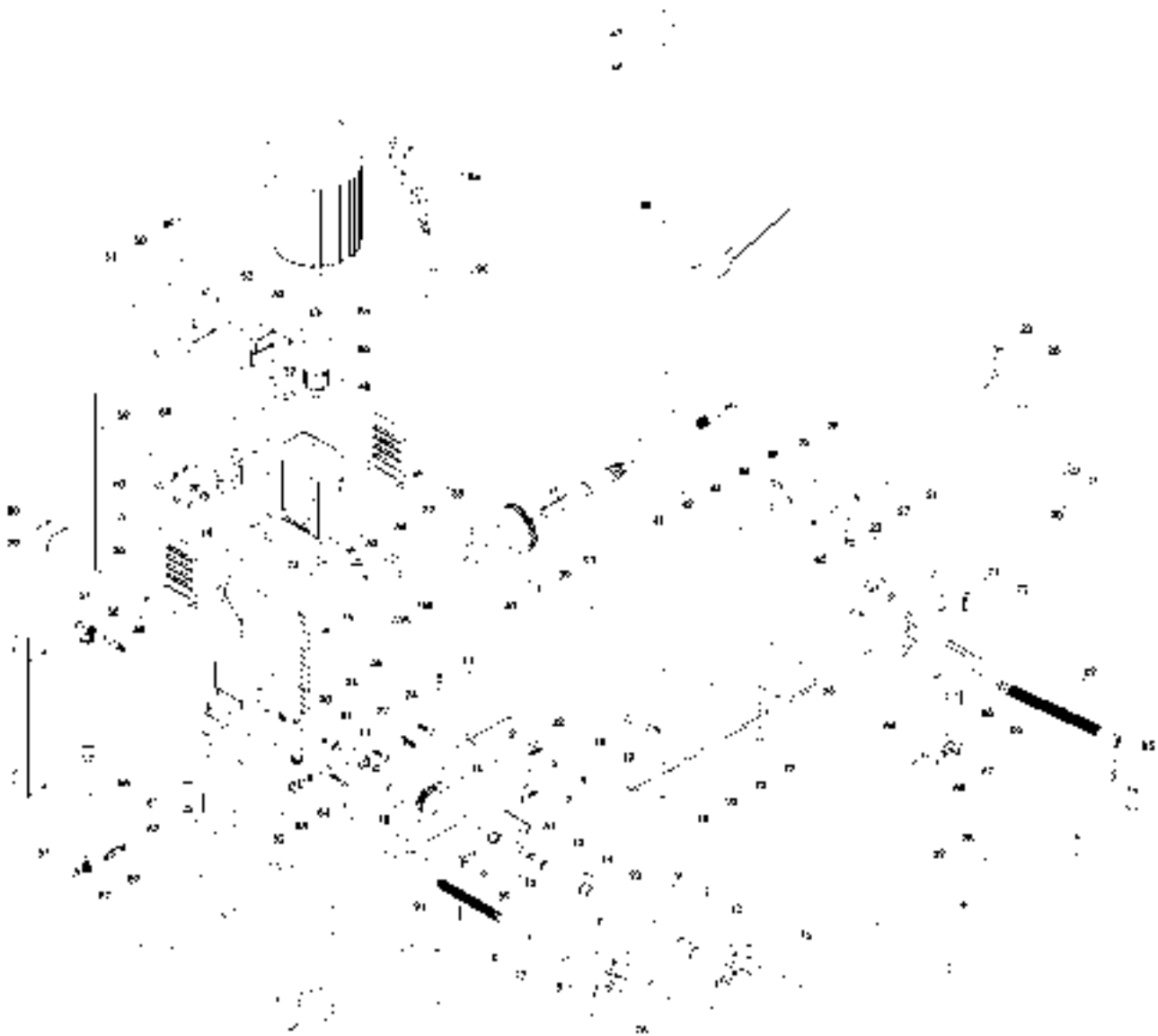
NO. PART NO. DESCRIPTION

| | | |
|----|---------|-----------------------------|
| 1 | 6294124 | BASE |
| 2 | 6294125 | BASE, MIDDLE |
| 3 | 6294126 | GIB |
| 4 | 6294127 | SCREW, SET, M6 X 20 |
| 5 | 6294128 | NUT, HEX., M6 |
| 6 | 6294129 | SCREW, LEAD |
| 7 | 6294130 | SCREW, SET, M6 X 10 |
| 8 | 6294131 | HANDWHEEL |
| 9 | 6294132 | SHAFT |
| 10 | 6294133 | GEAR |
| 11 | 6294134 | C-CLIP |
| 12 | 6294135 | HANDWHEEL |
| 13 | 6294136 | BEARING, #6002 |
| 14 | 6294137 | C-CLIP |
| 15 | 6294138 | SCREW, CAP M6 X 16 |
| 16 | 6294139 | PIECE, SETTING |
| 17 | 6294140 | GIB |
| 18 | 6294141 | SLIDE |
| 19 | 6294142 | SCREW, SET, M6 X 6 |
| 20 | 6294143 | COLLAR, SETTING |
| 21 | 6294144 | ROD, SETTING |
| 22 | 6294145 | SCREW, WING, M6 X 16 |
| 23 | 6294146 | PINION |
| 24 | 6294147 | SCREW, SET, M6 X 25 |
| 25 | 6294148 | ROD, LENGTH SETTING, REAR |
| 26 | 6294149 | BLOCK, LENGTH SETTING |
| 27 | 6294150 | ROD, LENGTH SETTING, FRONT |
| 28 | 6294151 | TABLE, WORK |
| 29 | 6294152 | SCREW, PHILIP HEAD, M6 X 20 |
| 30 | 6294153 | COLUMN |
| 31 | 6294154 | WASHER, WAVE |
| 32 | 6294155 | GIB |
| 33 | 6294156 | HEADSTOCK |
| 34 | 6294157 | PINION |
| 35 | 6294158 | SCREW, CAP, M6 X 12 |
| 36 | 6294159 | COVER, LEFT SIDE |
| 37 | 6294160 | COVER, RIGHT SIDE |
| 38 | 6294161 | SCREW, RD. HEAD, M5 X 12 |
| 39 | 6294162 | GEAR |
| 40 | 6294163 | COLLAR |
| 41 | 6294164 | SHAFT, GEAR |
| 42 | 6294165 | BEND, CONNECTING |
| 43 | 6294166 | SPRING |
| 44 | 6294167 | WASHER |
| 45 | 6294168 | SCREW, FLT HD HEX. M6 X 16 |
| 46 | 6294169 | HANDLE |
| 47 | 6294170 | GRIP, HANDLE |
| 48 | 6294171 | CHUCK, 1/2" & KEY |
| 49 | 6294172 | MOTOR, 1 HP, 1 PH, 115/230V |

NO. PART NO. DESCRIPTION

| | | |
|-----|---------|-------------------------|
| 50 | 6294173 | BOX, SWITCH |
| 51 | 6294174 | SCREW, CAP, M5 X 25 |
| 52 | 6294175 | SWITCH |
| 53 | 6294176 | SCREW, RD HD |
| 54 | 6294177 | SCREW, CAP, M6 X 20 |
| 55 | 6294178 | FITTING, CYLINDER |
| 56 | 6294179 | CYLINDER |
| 57 | 6294180 | C-CLIP |
| 58 | 6294181 | BLOCK, DEPTH SETTING |
| 59 | 6294182 | ROD, DEPTH SETTING |
| 60 | 6294183 | HANDLE, UNIVERSAL |
| 61 | 6294184 | SCREW, CAP, M10 X 30 |
| 62 | 6294185 | WASHER, SPRING |
| 63 | 6294186 | JAW, CLAMPING |
| 64 | 6294187 | BLOCK, CLAMPING |
| 65 | 6294188 | NUT, RAPID |
| 66 | 6294189 | TOE, FRICTION |
| 67 | 6294190 | SPRING |
| 68 | 6294191 | RIVET |
| 69 | 6294192 | SCREW, LOCKING |
| 70 | 6294193 | DISC, STOP |
| 71 | 6294194 | SCREW, CAP, M8 X 25 |
| 72 | 6294195 | WASHER, FLAT |
| 73 | 6294196 | SCREW, CAP, M8 X 30 |
| 74 | 6294197 | SCREW, CHISEL LOCKING |
| 75 | 6294198 | BUSHING, 1-1/8" |
| 75A | 6294221 | BUSHING, 3/4" |
| 75B | 6294222 | BUSHING, 5/8" |
| 76 | 6294199 | HANDLE, WHEEL |
| 77 | 6294200 | COLLAR |
| 78 | 6294201 | E-CLIP |
| 79 | 6294202 | COVER, BACK |
| 80 | 6294203 | SCREW, RD HD, M4 X 10 |
| 81 | 6294204 | KEY, CHUCK |
| 82 | 6294205 | HOLDER, CHUCK KEY |
| 83 | 6294206 | WASHER, SPRING |
| 84 | 6294207 | SCREW, CAP, M5 X 8 |
| 85 | 6294208 | NUT, CHUCK RELEASE |
| 86 | 6294209 | WASHER, WAVE |
| 88 | 6294211 | WRENCH |
| 89 | 6294212 | FITTING, LOWER CYLINDER |
| 90 | 6294213 | SCREW, WING |
| 91 | 6294214 | PIN, SPRING |
| 92 | 6294215 | KEY |
| 93 | 6294216 | KEY |
| 94 | 6294217 | CORD, POWER |
| 95 | 6294223 | PROTECTOR, HANDLE |
| 96 | 3005069 | ADAPTOR, CHUCK EXT. |
| 97 | 6294237 | CYLINDER, BRACKET |
| | 6294233 | HARDWARE KIT |

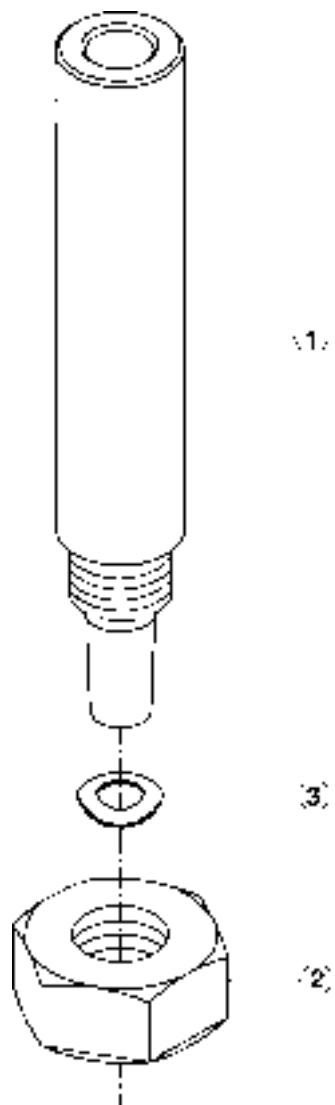
EXPLODED VIEW: Model 719A Mortiser



PARTS LIST: Optional Accessories

NO. PART NO. DESCRIPTION

| | | |
|---|---------|--|
| | 6294232 | DRILL ADAPTOR EXTENSION KIT (Items 1 thru 3) |
| 1 | 6294210 | SHAFT, DRILL ADAPTOR |
| 2 | 6294208 | NUT, CHUCK RELEASE |
| 3 | 6294209 | WASHER, SPRING |



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To order parts or reach our service department, please call our toll free number between 8:00 A.M. and 4:30 P.M. (CST), Monday through Friday. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately. Locating the EDP number of the part(s) required from your parts manual will also expedite your order.

Phone: (800) 248-0144

Fax: (800) 274-6840

If you are calling from Canada, please call 800-238-4746

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Website: www.powermatic.com

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